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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,103	01/12/2006	Antonio Pita-Szczesniewski	206,879	2652

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ABELMAN, FRAYNE & SCHWAB
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New York, NY 10017-5621

EXAMINER

NGUYEN, PHU HOANG

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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11/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,103	Applicant(s) PITA-SZCZESNIEWSKI, ANTONIO	
	Examiner PHU H. NGUYEN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement is made of Amendment received 6/23/2008. Claim 1 is currently amended. Claims 5-6 are previously presented. Claims 2-4 are cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szczesniewski et al. (U.S Patent No. 6358870) in view of Bair (U.S Patent No. 2220750).

Regarding claims 1, Szczesniewski discloses a method for preparing pre-reacted synthetic batches, with a low content of carbon dioxide, for the production of synthetic compound (corresponding to the claimed "synthetic silicates"), comprising the steps of:

mixing raw materials, minerals, partially treated minerals, intermediate products thereof or compounds, containing molecular systems selected from the group consisting of silica-sodium, silica-sodium-calcium, silica-sodium-magnesium, silica-calcium-magnesium, silica-sodium-calcium-magnesium, and mixtures thereof, in stoichiometric amounts selected from one or more invariant points or points on a line connecting invariant points from a phase diagram; and

calcining the mixture at reaction temperatures which do not form a liquid phase and release CO₂ to produce said pre-reacted and carbon dioxide-free synthetic

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compound that totally saturates the sodium, sodium and calcium, or the sodium, calcium and magnesium of a molecular glass formula (claim 1 of Szczesniewski).

However, Szczesniewski does not expressly disclose the step of adding cullet as recited in the instant claim 1. Bair discloses in the formation of glass by conventional methods, a dry mixture of coarse sand, fluxes such as soda ash and lime and enough of glass (about 20 or 25%) as cullet (column 1, line 24-29). Bair further discloses the mass (corresponding to the claimed "agglomerated") can be mulled to form nodules, or can be formed into briquettes by suitable methods. These briquettes can then be dried to coherent state eminently suited for use in the formation of glass (column 2, line 41-51). It is an inherent property of cullet to permits heat penetration (heat penetrating an object from the outer surface toward the center during heating) within the mixture of raw materials which is absorbed toward the center of the mixture. Therefore, it would have been obvious to one of ordinary skill in the art to add available cullet to the raw material which contains the molecular systems taught by Szczesniewski in process of making glass to save on cost of raw material.

Regarding claim 6, Szczesniewski further discloses the content of carbon dioxide in the pre-reacted batches can be between 1 and .5% by weight after 25 minutes of treatment (figure 3). Accordingly, claim 6 is rejected.

Response to Arguments

Applicant's arguments filed 7/21/2009 have been fully considered but they are not persuasive.

Applicant presented that by changing the title to "the production of synthetic silicates" would provide support for the amended claim 1 to differentiate from "making glass" from "making synthetic silicates" and suggested that the secondary reference is nonanalogous art. However, upon further consideration, the Examiner found that the broad meaning of synthetic silicates include glass. Furthermore, Szczesniewski discloses the production of synthetic compound corresponding to the claimed synthetic silicates.

In response to applicant's argument that reference of Bair (U.S Patent No. 2220750) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Szczesniewski and Bair are in the field of the applicant's endeavor of producing glass formulas wherein the raw materials for a specific molecular glass formula melt to form the desired glass.

In response to applicant's argument that the applicant has a different reason for combining, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant essentially argues that the intended use of glass cullet is to increase the efficiency of the heat transfer process and never used to promote fusing and never

melts. However, as discussed above in the rejection, the combination of Szczesniewski and Bair also teaches calcining the batch to a reaction temperature which does not form a liquid phase and adding a percent of cullet to the raw materials.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that the Bair reference alone discloses complete glass formulas and that the briquettes of Bair can not be degasified and therefore the Bair reference is an nonanalogous art. However, as explained above, when the references taken together as a whole teaches degasify a briquette with 20-25% of cullet to a reaction temperature that does not form a liquid phase and release carbon dioxide to produce carbon dioxide free synthetic silicates. Furthermore, Applicant indicated the present invention discloses synthetic silicate briquettes can later be melt to form glass formulas but only claims the process of making synthetic silicates. However, this presentation is corresponding to the disclosure of Szczesniewski (column 2, lines 31-50) and thus put Szczesniewski and Bair in analogous art since both teaches melting raw materials to form glass formulas.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHU H. NGUYEN whose telephone number is (571)272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 11/09/2009

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791